

INFORMATION DISCLOSURE CITATION

(Use several sheets if necessary)

Docket Number (Optional)

END920020007US

Application Number

10/078020

Applicant(s)

Won K. Choi et al.

Filing Date

Group Art Unit

1775

11016 U.S. PTO
10/078020
02/15/02

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL	REF	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
J3		6,229,248	5/2001	Kusabiraki et al.	310	348	
J3		6,228,322	5/2001	Takeda et al.	420	561	
J3		5,863,493	1/1999	Achari et al.	420	557	
J3		5,405,577	4/1995	Seelig et al.	420	561	
J3		5,393,489	2/1995	Gonya et al.	420	561	
J3		5,352,407	10/1994	Seelig et al.	420	561	
J3		4,778,733	10/1988	Lubrano et al.	428	647	
J3		6,156,132	12/2000	Yamashita et al.	148	400	
J3		6,086,687	7/2000	Oud et al.	148	400	
J3		6,077,477	6/2000	Sakai et al.	420	560	
J3		5,837,191	11/1998	Gickler	420	560	

FOREIGN PATENT DOCUMENTS

REF	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	Translation	
						YES	NO
J3	131,299	8/1919	GB				

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

J3		Moon et al., EXPERIMENTAL AND THERMODYNAMIC ASSESSMENT OF Sn-Ag-Cu SOLDER ALLOYS, Journal of ELECTRONIC MATERIALS, Vol. 29, No. 10, 2000, pages 1122-1136

EXAMINER

John Zimmerman

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9/17/03

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U.S. PATENT DOCUMENTS

*EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
J	5,520,752	5/1996	Lucey, Jr. et al.	148	400	
J	5,833,921	11/1998	Paruchuri et al.	420	589	

FOREIGN PATENT DOCUMENTS

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	NO

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10/078,020

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APR 08 2002

U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	6,056,189	5/2000	Gao et al.	228	207	
	5,918,795	7/1999	Yamaguchi et al.	228	200	
	5,874,043	2/1999	Sarkhel et al.	420	557	
	5,843,371	12/1998	Yoo et al.	420	562	
	5,733,501	3/1998	Takao et al.	420	562	
	5,730,932	3/1998	Sarkhel et al.	420	562	
	5,658,528	8/1997	Ninomiya et al.	420	562	
	5,655,703	8/1997	Jimarez et al.	228	180.22	
	5,580,520	12/1996	Slattery et al.	420	557	
	5,538,686	7/1996	Chen et al.	420	557	
	5,533,256	7/1996	Call et al.	29	840	

FOREIGN PATENT DOCUMENTS

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	NO
	56017179	2/1981	Japan				
	68124	7/1991	Australia				
	0363740	4/1990	EPO				

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

	Hanson, M., CONSTITUTION OF BINARY ALLOYS, 1958, McGraw-Hill Book Company, 4 pages
	Bath, J. et al., Research Update: LEAD-FREE SOLDER ALTERNATIVES, Vol. 11, No. 5, May 2000, Circuit Assembly, pages 30-40

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U.S. PATENT DOCUMENTS

*EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
B	5,527,628	6/1996	Anderson et al.	428	647	
B	5,439,639	8/1995	Vianco et al.	420	562	
B	5,344,607	9/1994	Gonya et al.	420	562	
B	5,328,660	7/1994	Gonya et al.	420	562	
B	5,256,370	9/1996	Slattery et al.	420	557	
B	5,255,839	10/1993	de Costa Alves et al.	228	180.21	
B	5,229,070	7/1993	Melton et al.	420	557	
B	5,221,038	6/1993	Melton et al.	228	180.2	
B	5,147,084	9/1992	Behun et al.	228	56.3	
B	4,875,617	10/1989	Citowsky	228	123	
B	4,806,309	2/1989	Tulman	420	562	

FOREIGN PATENT DOCUMENTS

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	NO

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

B			YOR919950085, Kang et al., FLIP CHIP INTERCONNECTIONS USING LEAD-FREE SOLDERS, 4 pages (no date)

EXAMINER

John Zimmerman

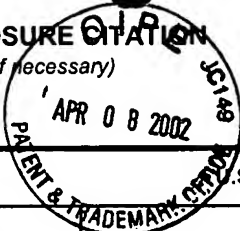
DATE CONSIDERED

4/17/03

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U.S. PATENT DOCUMENTS

*EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
Jg.	4,170,472	10/1979	Olsen et al.	75	175A	
Jg.	3,716,907	2/1973	Anderson	29	470.9	
Jg.	2,105,405	1/1938	Chase	285	106	

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OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

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